

**EVALUATION OF CONCERN KENYA'S  
KERIO VALLEY CASH TRANSFER PILOT  
(KVCTP)**

**APRIL – JUNE 2008**

**Mike Brewin  
Development Consultant  
July 2008  
mike.brewin@gmail.com**

## CONTENTS

1. EXECUTIVE SUMMARY.....	4
2. METHODOLOGY .....	7
3. BACKGROUND.....	8
3.1 Why was the Kerio Valley Cash Transfer Pilot (KVCTP) Implemented?.....	8
3.2 Profile of KVCTP Beneficiaries.....	9
3.3 What and Where was the Kerio Valley Cash Transfer Pilot? .....	10
3.3.1 Objectives, location and number of beneficiaries .....	10
3.3.2 Calculation of the size of the cash transfer.....	11
3.3.3 The M-pesa system and how the cash was distributed.....	13
4. PROCESS FINDINGS.....	17
4.1 Project Inception.....	17
4.2 Coordination Between Partners .....	17
4.3 Communication of Project Objectives to Target Communities .....	17
4.4 Targeting and Registration of Beneficiaries.....	17
4.5 Timeliness .....	18
4.6 Cash Distributions .....	18
4.6.1 Beneficiary travel times and associated costs.....	18
4.6.2 M-pesa agent travel times and associated costs.....	19
4.6.3 The issue of lost and non-activated SIM cards.....	20
4.6.4 Summary of other problems encountered .....	21
4.7 Fiduciary Risks .....	21
4.7.1 Security of cash and beneficiaries on site and in transit.....	21
4.7.2 Beneficiary Identification.....	22
4.8 Control of Cash .....	23
4.9 Use of Cash.....	23
4.10 Appropriateness of KVCTP .....	23
4.10.1 Appropriateness of cash.....	24
4.10.2 Appropriateness of size of transfer .....	24
4.10.3 Appropriateness of the frequency of the transfer .....	25
4.11 Adherence to SPHERE Standards .....	26
5. IMPACT FINDINGS.....	28
5.1 Impact on Household Food Security .....	28
5.2 Impact on Market Prices.....	28
5.3 Impact on Non-Beneficiaries and Intra Community Dynamics .....	29
5.4 Impact on Gender Relations.....	29
5.5 Impact on M-pesa Agents and Safaricom .....	29
5.6 Impact on Market Traders .....	30
5.7 Other Impacts on Beneficiaries .....	30
6. COMPARISON WITH STRAIGHT FOOD DISTRIBUTION.....	31
7. MOVING FORWARD AND RECOMMENDATIONS .....	34
7.1 Size of Transfer .....	34
7.2 Delivery of Transfer .....	34
7.3 Incentives for Agents.....	34
7.4 Value for Money .....	35
7.5 Other Applications for M-pesa.....	35
8. REFERENCES.....	36
9. ACKNOWLEDGEMENTS .....	37
10. APPENDIX 1: TERMS OF REFERENCE .....	38

## **ACCRONYMS**

CBT	Community Based Targeting
DoE	(Catholic) Diocese of Eldoret
FEWSNET	Famine Early Warning System Network
GPRS	General Packet Radio Service (system of transferring packet using GSM network)
GoK	Government of Kenya
GSM	Global System for Mobile communications (standard system for transmission of voice and data between cellular phones)
ID	Identity (normally Kenyan identity card or passport)
IDP	Internally Displaced People/Person
KNBS	Kenya National Bureau of Statistics
Kcal	kilocalories
KSh	Kenya Shillings. Also denoted by the symbol '/='. (1 US Dollar = 60KSh; 1 Euro = 98KSh)
KVCTP	Kerio Valley Cash Transfer Pilot
MFE	Missing Food Entitlement
M-pesa	Safaricom service offering transfer of money by cell phone (pesa means money in Swahili)
PIN	Personal Identification Number
SIM Card	Subscriber Identity Module (removable card with integrated circuitry used to store data on mobile phones)
SIM Certificate	Plastic mounting for SIM card detailing phone and PIN numbers
SMS	Short Messaging Service (used to send 'text messages')
SSA	Sub-Saharan Africa
WFP	World Food Programme

## **1. EXECUTIVE SUMMARY**

The Kerio Valley Cash Transfer Pilot (KVCTP) was Concern and its local partner the Catholic Diocese of Eldoret's short-term and targeted response to the food security problems that affected communities in four Sub-locations in Baringo North and Pokot East Districts as a result of the post election violence which rocked Kenya in the early months of 2008. 571 households (about 3700 individuals) whose livelihoods had been badly compromised by the violence – loss of livestock or homesteads, for example – were selected to receive assistance through a community-based targeting process. It was decided to provide assistance in the form of cash rather than food because of the diversity of beneficiaries' needs and the flexibility that cash offered in meeting them. Concern partnered with Safaricom in order to pilot the use of the M-pesa system which enables that transfer of cash between mobile phones via a text message. Virtual cash received on a phone can be redeemed at any one of a network of M-pesa agents throughout the country. The KVCTP is the first time that M-pesa, or any mobile-phone based system, has been used for transferring cash in an emergency or development context.

Concern aimed to provide each household with cash sufficient to purchase 50% of one month's minimum calorific requirements through two transfers – the second taking place about two weeks after the first. A survey of food prices in Aror (the market serving the targeted communities) conducted in early April found that a transfer of 620/= per household member would be sufficient to buy 50% of calorific requirements for two weeks assuming prices remained the same.

Wherever possible (identity documents permitting) the matriarch of each household was registered to receive the cash and issued with an M-pesa-enabled SIM card. In cases where the senior female of the household had lost her ID, her husband or a close relative was registered on the understanding that they would hand over the cash once received. 45 handsets and 60 solar chargers were also provided to beneficiaries. The total cost of equipping beneficiaries to receive M-peas payments and transaction charges for sending the cash totalled 424,650/=. The first distribution took place by using 'clusters' – beneficiaries were clustered into groups of ten and their combined transfer was sent to the phone number of the cluster leader who then collected the cash and distributed it accordingly amongst the members of the group. For the second transfer each beneficiary was issued with a SIM card and had to travel to the distribution site personally to collect their cash.

Beneficiaries received the first transfer on the 10<sup>th</sup> of May and the second on the 29<sup>th</sup> May. Both distributions were facilitated by M-pesa agents who travelled down to the distribution site - for security reasons Kinyach police station - with the necessary cash. Technical issues, largely relating to non-activated SIM cards, meant that the first distribution took about three days to complete, while the second distribution took two days. As with a food distribution, beneficiaries usually spent the best part of a day travelling to and from the distribution and collecting their transfer. Some less mobile beneficiaries found it difficult to make the return journey to the distribution site, as they would have with a food distribution, strengthening the argument for using the 'cluster' system under certain circumstances. In total 2,876,480/= was transferred through two distributions.

No security incidents were reported either transferring cash to the distribution site or by beneficiaries returning home with their cash. The M-pesa system is particularly attractive in that it offers a solution to one of the biggest problems facing NGOs involved in cash transfers – that of ensuring security of cash while being counted and transported. M-pesa does away with the need for counting out each beneficiary's cash entitlement as a bulk payment is made from the implementing agent to Safaricom in Nairobi. In addition, Safaricom takes full responsibility for all the cash from the time it is deposited in its

account until it is distributed to beneficiaries, in this case thereby relieving Concern of the worry of transporting large amounts of cash through insecure areas.

The evaluation found that targeting was good but, as can be expected in a pilot, there were many other households who would have qualified for assistance had resources been available. Targeting women, combined with the relatively small size of the transfer, was effective in ensuring that women retained control of the cash. Qualitative evidence indicates that about 70% of the transfer was spent on food, with the remaining 30% on transport and other non-food essentials. No incidents of misuse of the cash were found during this review.

Rapid inflation of food prices which occurred between the time of the market survey and the cash distributions served to erode the purchasing power of the transfers, meaning that beneficiaries were not able to buy half of their minimum needs as originally planned. Strongly entrenched sharing norms within communities also functioned to reduce nutritional impact on beneficiaries as food, and to a lesser extent cash, was gifted to non beneficiaries.

Although difficult to quantify in the time available for the survey, it appears that the pilot had a strong impact on beneficiary empowerment and sense of dignity. Use of a process which required beneficiaries to interact with new technology transformed them from benign recipients of aid to the active participants in a process. The provision of phones, SIM cards and chargers also gave recipients an opportunity for communication that they had never experienced before.

A comparison of the KVCTP with a 'traditional' food distribution finds that use of the same amount of funds to purchase wholesale and distribute food staples would have provided beneficiaries with two more days' worth of minimum calorific requirements (44 compared to 42); the difference being a result of cheaper wholesale prices and the equipment costs. If the costs of equipping beneficiaries to receive M-pesa are removed, and the remaining funds applied to a cash or food distribution, however, the cash transfer option emerges as more effective; cash and food would provide 42 and 41 days' minimum calorific requirements respectively. Cash transfers also yield the benefits of empowering recipients with choice and agency and have multipliers on the local economy in a way that food transfers do not.

These findings indicate that even in remote rural locations such as the Kerio Valley, provided the difference between wholesale and retail prices is within a certain range, local food markets are actually functioning and that the cash transfer programme is long enough to justify the costs of the equipment (phones, chargers etc.), the use of M-pesa is preferential to food distributions. The parameters relating to market prices and duration of intervention within which an M-pesa cash distribution presents a more effective option than food in rural areas still need to be explored and defined, as do the distances which M-pesa agents will be prepared to travel to deliver cash.

The following recommendations are made: -

- In future Concern consider linking the size of the transfer to the price of a basket of staple foods.
- Early warning data be considered when establishing the size of cash transfers.
- Future M-pesa cash transfer schemes should consider ways of making the collection of cash by disabled, or labour constrained beneficiaries easier.
- Future distributions take place once a month rather than every two weeks.
- Before any future cash transfers using M-pesa, Concern liaises with Safaricom to establish what the minimum number of beneficiaries or amount of commission has to be to create sufficient incentives for agents to stay involved.

- Concern explores further the point at which cash distributions through M-pesa become more efficient than food distributions in terms of providing minimum calorific requirements.
- Concern works with Safaricom to help them explore ways in which M-pesa may be tailored (possibly through an adjustment of charges for members of certain schemes) to suit the requirements and profiles of the 50% or so of households living below the poverty line in Kenya.

## **2. METHODOLOGY**

The KVCTP evaluation took place over 12 days between the 2<sup>nd</sup> and 20<sup>th</sup> June 2008. Four days were spent in the field interviewing beneficiaries and non beneficiaries, and community leaders in the targeted areas. M-pesa agents involved in each of the distributions were also interviewed. A representative from the Diocese of Eldoret (DoE) was interviewed over the phone from Nairobi, and the Safaricom representative was interviewed in person in Nairobi, as were Concern Worldwide staff.

Fieldwork covered three tribal groups of Marakwets, Pokot and Tugen based in the four targeted areas – Kinyach, Kipnai, Ayatia and Kalabata. A variety of information gathering techniques were used. Information on the background to the crisis, and targeting were done through focussed discussions with groups of up to 30 beneficiaries and non-beneficiaries. Perceptions of the fairness of the targeting process were measured through interviews with small numbers of non-beneficiaries. Quantitative information – how cash was used, for example - was collected through the use of proportional piling, although it should be noted that the number of individuals interviewed is not statistically significant.

The consultant was assisted in the collection of information on cultural norms and practices and the programme's gender-related impacts by a Concern staff member, Serene Philip who interviewed small groups of women in each community visited.

As English was rarely understood, particularly by the female interviewees, the consultant used an interpreter provided by the DoE for all fieldwork.

### **3. BACKGROUND**

#### **3.1 Why was the Kerio Valley Cash Transfer Pilot (KVCTP) Implemented?**

Kenya held the fourth multiparty General Election on 27th December, 2007. A dispute that followed announcement of the results by the Electoral Commission of Kenya quickly degenerated into an unprecedented seven-week long spate of violence in many parts of the country, especially in Nyanza, Rift Valley, Coast, Western, and Nairobi Provinces. Within a very short period of time, numerous shops, commercial outlets and crops were looted, people uprooted, with tens of thousands fleeing ethnically fuelled and hate motivated attacks. In some areas bandits took advantage of the chaos to launch raids on neighbouring communities, in the knowledge that police and security forces were engaged elsewhere. The violence resulted in the loss of 1,200 lives and created between 400,000 – 600,000 Internally Displaced Persons (IDPs), only about half of which moved to IDP camps. A further 12,000 refugees fled across the border to Tanzania and Uganda and over 41,000 properties were destroyed.

Apart from the immediate humanitarian implications, the economic cost of the crisis has been put at over KSh 100 billion (approx US\$1.5 billion), with a loss of an estimated 500,000 jobs in manufacturing, agro-industry and tourism. Serious concerns about the nation's food security status later in the year are also emerging as the violence meant that people have not been able to harvest or cultivate their farms. The World Bank estimated that over 2 million Kenyans may have been driven into poverty as a result of the post election violence.

Humanitarian relief agencies largely met the short-term needs of IDPs in formal camp situations and a number of agencies, including Concern, focused a large part of their effort outside of the formal camp situation, namely informal IDP camp settlements and 'returnee' populations in the Rift Valley, Eldoret and Kitale, Naivasha and Nakuru and the urban and rural areas of Nairobi and Kisumu slums. Concern's implementation partner in the Rift Valley area – the Catholic Diocese of Eldoret - alerted Concern to the particular issues in the Kinyach area.

Over the last few years a number of aid agencies (including Concern) have been experimenting with using cash instead of or as well as food as a response to vulnerable populations' transient food security needs. It is beyond the scope of this document to fully explore the pros and cons of cash versus food, but briefly, the main arguments in favour of cash over food are that: -

- Cash enables beneficiaries to purchase what they need whereas food items provided in a traditional food distribution may not be suited to a recipient's requirements and end up being sold at a heavy discount.
- Transporting and distributing cash can be cheaper than transporting and distributing food.
- Cash allows beneficiaries to cater for their non-food needs
- Distributing cash avoids possible disruption to markets caused by the injection of large amounts of food in an area thereby reducing demand.
- The flow of cash in the local community creates multipliers which are of benefit to non recipient households.

Evaluations of other cash transfer programmes in SSA have shown that, contrary to initial fears, incidence of misuse of cash by recipients is low and that, provided markets work with a certain level of efficiency, cash transfers are a cost effective alternative to food distributions.

The KVCTP was, therefore, implemented to serve two purposes: It is first meant as a response to the crisis affecting vulnerable households in the Kerio Valley and, secondly,



it explores the efficiency of the M-pesa system as a means of delivering cash to highly vulnerable and marginalised rural households in Kenya.

### **3.2 Profile of KVCTP Beneficiaries**

Starting just north of Nakuru and running north for several hundred kilometres, the Kerio Valley marks the western boundary of the Great Rift Valley. While the cooler highlands at the top of the escarpments around Molo, Eldoret and Kitale to the west are characterised by good rainfall and soils, arable farming, and a relatively well developed infrastructure, the valley is drought prone and poorly serviced by roads or electricity. A number of tribes including the Tugen, Marakwet and Pokot live in the valley, relying mainly on livestock but also to a limited extent on rain-fed agriculture for their livelihoods.

The KIHS (GoK 2007) estimates that households in the Rift Valley Region acquire 52.5% of their food needs through purchases (largely serviced by selling livestock), 29.7% from their own produce (mainly maize, sorghum and millet), 11% from their own stocks of goats and cattle and 6.8% from gifts or remittances. Under 'normal' conditions Rift Valley inhabitants spend about 60% of their income on food compared to an average for rural Kenya of 62.3%.

Just under half (49%) of Rift Valley's population live below the poverty line, meaning they are unable to cover their basic food and non-food needs, although in rural areas the percentage is higher – well over the national average of 49% living below the poverty line for rural areas.

At a District level, the KIHS calculates that 61% of the population of Baringo, 62% of West Pokot and 71% of Marakwet are 'food poor'. In other words, in the best case less than 40% of the population has the resources necessary to provide their basic energy requirements of 2,250kcal per adult equivalent per day.

As mentioned above, the communities targeted under the KVCTP rely mainly on livestock rearing as their main source of livelihood. Men have responsibility for the cows and mature goats and are also responsible for the security of their village and clan. Strong cultural norms and entrenched gender roles predicate that men rarely get involved in tasks outside these areas. Polygamy is widespread and bride price is paid in livestock – a practice which helps to perpetuate the cattle rustling which is common in the region.

Women take care of nearly everything else, including cooking, fetching water for human and young animal consumption and looking after the animals which are too sick or young to join the herds out in the bush. The womenfolk also service the household's daily food needs, either through growing food when the rains allow or by collecting and selling firewood and roofing grass or by doing piecework on other people's farms.

Reproductive roles appear to define socialization patterns within the family and community. Women seem to communicate and relate much more within their gender group than across. They provide support to each other within their families as well as across to other neighbours and relatives and play a key role in socializing children to their gender-ascribed roles. The male reproductive role is to produce many children, especially boys who can take up cattle rearing and protection of the community against raids.

Communities defined a 'good man' or 'social leader' as one who demonstrates the following traits: -

- An ability to oversee the women in order that she provide for the daily needs of the family.
- An ability to mediate and resolve disputes in the household.
- An ability to take care of other members of the community, particularly against raids.

- Good 'character' including not being an alcoholic and an ability to relate to others.

A man who possesses these attributes may then be given the opportunity to be elected as a Tribal Elder. His responsibility then is to oversee the security and safety of the community as well as to communicate with the Area Chief and Government about the needs of his tribe.

The Rift Valley region was one of the areas worst affected by post election violence and a significant number of households in the pilot project's working area lost livestock, food supplies and household items to politically motivated and opportunistic armed rustlers who took advantage of the poor security situation in early January to launch raids throughout the area. Those who fled the raids with their stock often lost many animals because of the different climate and environment in the areas to which they escaped.

Many of the beneficiaries interviewed for this survey had lost all or nearly all of their animals to disease or raiders. The importance of livestock to livelihoods in these communities is huge – accounting through sales or direct consumption for over half the average household's food requirements – so the loss of the bulk of a herd or flock immediately removes the central pillar of the household economy. Matters are made worse by the drought which is affecting the area and disruption caused to the crop production cycle. Practically all of rural households' remaining food needs are met through subsistence production but, even where households were not prevented from planting by the violence, lack of rainfall has severely impacted on yields. Poor rainfall has also resulted in any remaining livestock losing condition and, consequently, resale values have plummeted.

The combination of post election violence and drought were timed almost perfectly to cause maximum damage to a rural population already extremely vulnerable to climatic variability and insecurity. Clearly, many households in the affected areas of the Kerio Valley have, over the last six months, been cast into a deeper and more challenging level of poverty than they have experienced in recent years.

### **3.3 What and Where was the Kerio Valley Cash Transfer Pilot?**

#### **3.3.1 Objectives, location and number of beneficiaries**

The objectives of the KVCTP were twofold: –

- To offer transient relief to some of the households affected by the post election violence in the Kerio Valley, specifically in Kinyach, Kalabata, Ayatia and Kipnai sub-locations in Baringo North and Pokot East Districts (see table 1 below).
- To trial the efficiency of the M-pesa system as a means of making cash safety net transfers to poor people living in marginal rural areas.

The pilot was a rapid response intervention of limited scale and, as such, its objectives were not articulated in the form of a logical framework or any elaborate project document. The intervention was clearly primarily a response to an emergency, but it was also an opportunity to test first how the private sector could be involved in humanitarian work in a more meaningful way than normal and how effective the M-pesa technology is in delivering cash assistance in emergencies in remote areas. Evaluations of cash transfer programmes suggest that beneficiaries who receive cash feel a greater sense of empowerment and dignity than had they received an equivalent amount of food; Concern places great value on the extent to which dignity and choice is upheld so cash rather than food seemed the best option in terms of meeting these objectives.

<b>Table 1: Location and Number of Households Targeted under KVCTP</b>			
<b>District</b>	<b>Location</b>	<b>Sub-location</b>	<b>Targeted households</b>
Baringo North	Kinyach	Kinyach	169
		Kalabata	118
	Kaboskei Kerio	Ayatia	185
Pokot East	Loiwat	Kipnai	99
<b>Total</b>			<b>571</b>

Concern and the DoE selected the target areas on the basis of discussions with local leaders. The locations were chosen because people affected by the post-election violence were concentrated in a relatively small area, easing the logistics of distribution. Beneficiaries were selected from four sub-locations and targeted households comprised an average of 6.4 members (see table 2 below).

<b>Table 2: Number of Beneficiaries, Household Size and Amount of Cash Received</b>				
<b>Sub-Location</b>	<b>Number of Beneficiaries</b>	<b>Mean HH size</b>	<b>Amount received per in each location per distribution (KSh)</b>	<b>Total cash received (KSh)</b>
Kinyach	1167	6.9	373,440	746,880
Kipnai	627	6.3	200,640	401,280
Ayatia	395	6.2	126,400	252,800
Kalabata	743	6.3	237,760	475,520
<b>Total</b>	<b>3,747</b>	<b>6.4</b>	<b>938,240</b>	<b>1,876,480</b>

### 3.3.2 Calculation of the size of the cash transfer

In early April the Emergency Co-ordinator and the Health and Nutrition Programme Manager conducted a survey of food prices in Eldoret and Aror markets and transport costs at the time. On the basis of the assessment, Concern calculated that each household member would require KSh 316 (rounded to KSh 320) to buy their 'basic food needs' for two weeks (in other words KSh 640 or about €6.4 per month) and if food prices stayed the same, the provision of cash would be more cost effective than the provision of food.

Concern did not conduct a detailed assessment of the extent of targeted households' missing food entitlement (MFE) and the project document is not specific about what is meant by 'basic food needs' - whether this referred to a household's MFE or its minimum calorific requirements is unclear. However, the consultant's conversations with Concern staff revealed that it was estimated that households had a food deficit of about 50% so the size of the cash transfer was calculated to cover this. In other words, the transfer of 320/= per household member every two weeks would enable households to meet 100% of their food needs – half met by the cash transfer, the other half met by food from other sources.

A calculation of the quantities estimated by Concern to provide 50% of an individual's food needs shows that their reckoning was accurate – the quantities of the different foods shown in column B of table 3 below would have provided a person with approximately 1,065 kcal per day (column C), or just under half of the minimum adult daily requirement of 2,200 kcal. Allowing for inflation, the cash amount of 640/= per month also tallies with KIHBS data, which in 2006 found that the adult-equivalent food poverty line in rural Kenya was 988/= per month, or 494/= for a 50% transfer.

Concern planned to provide the cash transfer in two fortnightly tranches, each of which was supposed to enable the purchase of 25% of an adult's minimum monthly

requirements. The total transfer would therefore enable a household to buy half of one month's minimum food requirements at April prices.

<b>Table 3: CONCERN's Calculation of the Size of the Cash Transfer</b>					
<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>
<b>Food Item</b>	<b>Quantity required per month for hh of six</b>	<b>Total calories provided by quantities in column B</b>	<b>Unit cost per month for hh of six (KSh)</b>	<b>Total monthly cost for hh of six (KSh) (BxC)</b>	<b>Cash transfer (KSh) (to purchase 25% of hh member's basic monthly requirements) (E/2)</b>
Sugar	4kg	15,600	100	400	33.3
Cooking oil	2kg	16,000	200	400	33.3
Beans	10kg	9,000	80	800	66.6
Maize	45kg	149,850	20	900	75
Veg & other	1	1,200	1,300	1,300	108.3
Total	-	191,650	-	3,800	316.6 (rounded up to 320)
<b>Total calories per hh member per month <math>((191,650 \div 6) \div 30) = 1,064</math> kcal (48% of recommended daily adult minimum)</b>					

### 3.3.3 The M-pesa system and how the cash was distributed

Instead of going down the route of handling the cash distribution themselves – proven by Concern Malawi to be very time consuming in the FACT project<sup>1</sup> – Concern Kenya chose to trial the M-pesa system as a viable and cost effective mechanism for delivering cash transfers to vulnerable households.

M-pesa is a joint venture between Vodaphone and Safaricom which allows cash to be sent over the Safaricom mobile phone network. Basically the system, branded by Safaricom as a facility that allows you to ‘*send money by phone anytime, anywhere*’, allows one M-pesa user to send cash to another M-pesa user over the GSM mobile phone network. Safaricom’s description of M-pesa is given in box 1 below.

#### **Box 1: Safaricom Description of M-pesa Service**

M-PESA is a Safaricom service allowing you to transfer money using a mobile phone. Kenya is the first country in the world to use this service, which is offered in partnership between Safaricom and Vodafone. M-PESA is available to all members of the public, even if you do not have a bank account or a bankcard.

##### **HOW TO REGISTER FOR M-PESA**

Go to an M-PESA Agent and: -

1. Upgrade your SIM for free
2. Register for M-PESA at an M-PESA Agent
3. Activate the M-PESA menu on your phone

You will need your Safaricom SIM and National ID/Passport. You do not need to have a bank account.

##### **HOW TO SEND M-PESA**

Go to an M-PESA Agent and: -

1. Buy M-PESA value by depositing cash
2. You and your Agent will receive SMS confirming the transfer
3. On your M-PESA phone menu, select “Send Money”
4. Enter recipient’s phone number, the amount and your PIN
5. You and the recipient will receive SMS confirming the transfer

##### **HOW TO GET CASH**

###### **If you are a registered M-PESA Customer**

Go to an M-PESA Agent and: -

1. Give your phone number and show your ID / passport
2. Go to your M-PESA menu, select Withdraw money
3. Enter the Agent number, the amount and your PIN
4. You and your Agent will receive an SMS confirming the transfer
5. The Agent will then give you the cash

###### **If you are not a registered M-PESA customer**

Go to an M-PESA Agent and: -

1. Give your phone number and show your ID/Passport
2. Give the code in your SMS from M-PESA.
3. The Agent will do the transaction on your behalf using his phone.
4. You and your agent will receive an SMS confirming the transfer.
5. The agent will give you the cash.

##### **DEPOSIT CASH INTO YOUR M-PESA ACCOUNT AT ANY AUTHORISED AGENT.**

To register or transact at any M-PESA agent, you will need your original identification document:  
National ID, Passport, Military ID, Diplomatic ID or Alien ID.

<sup>1</sup> Brewin, 2006

Anyone sending money must be registered with M-pesa, have M-pesa 'activated' on their SIM card, have the M-pesa menu installed on their phone, and have the necessary identity documents (normally a Kenyan ID card or passport, both of which enable the owner to be identified by both a photo and a discrete number) before cash can be sent. The sender then goes to one of 2,500 M-pesa agents throughout Kenya, deposits cash with them and, once an SMS has been received confirming that they have cash in their account, sends the money to the phone number of the recipient using the special menu on their phone. Sending any amount up to 35,000/= to a registered user entails a flat fee of 30/=; charges for sending funds to unregistered users vary depending on the amount sent (see box 2 below).

The recipient will receive an SMS alerting them once funds have arrived in their 'account'. If they are a registered M-pesa user they can withdraw the cash or keep it in their account to send on to someone else, buy airtime, etc. If they are not registered they must withdraw the cash at a registered M-pesa agent.

Any amount between 100/= and 35,000/= can be sent in one transaction – amounts larger than 35,000/= can be sent using multiple transactions up to a maximum of 70,000/= per day. Tariffs charged by M-pesa for sending and receiving money and other services are presented in box 2 below.

**Box 2: M-pesa Tariffs**

Transaction Type	Transaction Range (KSh)		Consumer Charge (KSh)
	Min	Max	
<b>Value Movement Transactions</b>			
Deposit cash	100	35,000	0
Send money to registered M-pesa user	100	35,000	30
Send money to non-registered M-pesa user	100	2,500	75
	2,501	5,000	100
	5,001	10,000	175
	10,001	20,000	350
	20,001	35,000	400
Withdraw cash by registered M-pesa user	100	2,500	25
	2,501	5,000	45
	5,001	10,000	75
	10,001	20,000	145
	20,001	35,000	170
Withdraw cash by non registered M-pesa user	100	35,000	0
Buy airtime	50	10,000	0
<b>Information Transactions</b>			
Show balance			1
Change PIN			1

75 percent of the sending and receiving fees are retained by the agent as commission. Given normal GSM signal coverage, each transaction takes about one minute<sup>2</sup> and a relatively busy agent can expect to handle upwards of 200 transactions a day, yielding a minimum commission revenue of 3,750/=. Most M-pesa agents also offer other goods and services such as the sale of handsets, airtime and phone accessories; the profits generated from the overall package means that they can rent premises in prime business locations in town centres.

While approximately 93 million shillings is sent through M-pesa every day<sup>3</sup>, the vast bulk of this traffic takes place between urban centres which offer agents good cell phone coverage, banking facilities, a reasonable level of security and a literate clientele which both sends and receives money ensuring that a certain level of liquidity is maintained. By attempting to use M-pesa to supply cash to often illiterate beneficiaries with little or no exposure to financial or telephone services, living in areas which offer few of the preconditions for a successful M-pesa agency, Concern was taking a bold step and had to support or subsidise a number of elements of the process to ensure that the programme had a reasonable chance of success.

The first obstacle that had to be overcome was the low level of phone ownership amongst the beneficiary population. Of the 571 targeted households just 225 (39%) reported owning or having once owned a phone at the time of registration on the programme. Concern provided sufficient handsets (45 at a total cost of 103,500/=) to enable groups of ten households to share one handset between them.. 60 solar chargers (3,500 each) and 15 adapters (70/= each) were also provided as the target area was not served by mains electricity. I

Illiteracy and unfamiliarity with operating the handsets amongst the beneficiaries was an issue, but was overcome by Concern by employing a number of 'clerks' in the same way that assistants are employed during food distributions. These clerks were generally literate young people from the local community who understood how to operate the phones and were on hand on distribution days to assist beneficiaries with the process of receiving the M-pesa text message. Clerks' allowances totalled 24,000/=.

The next matter was issuing beneficiaries with Safaricom M-pesa-registered SIM cards. Although it was planned that each beneficiary was issued with their own SIM card from the outset, for technical reasons the first round of cash was distributed through clusters whereby groups of 10 households shared a SIM card and funds for all ten households were sent onto the one card and collected and divided up by the group member to whom the card was registered. The technical problems were eventually resolved; for the second transfer each beneficiary was given a SIM card and registered as an M-pesa user, however, in most cases they still had to wait their turn to use a shared handset at the distribution point so they could insert their card to access the M-pesa message. Concern bought 400 cards at 50/= each then loaded each with 20/= airtime. Registration for the M-pesa service was free.

The costs of sending and receiving the transfer were borne by Concern. At the time of writing this report data on these costs were not available, but if the average transfer size was 1,920/= (320/= x 6), they can be estimated to be 55/= per transaction (30/= for sending and 25/= for receiving), or a total of 56,100/= (€572) over the entire programme.

Total costs associated with equipping beneficiaries to receive the cash transfer and sending through M-pesa were 424,650/= (€4,333) and are presented in box 3 below.

---

<sup>2</sup> M-pesa Agent personal comment

<sup>3</sup> The Economist, June 7th – 13th 2008

**Box 3: Costs to Equip Beneficiaries and to Send Cash through M-pesa**

Item	Cost per unit	Number of units	Cost (KSh)
Phones	2,300	45	103,500
SIM Cards	50	400	20,000
Airtime	20	500	10,000
Solar chargers	3,500	60	210,000
Adapters	70	15	1,050
Sending and receiving charges (estimate)			56,100
Clerks' Allowances			24,000
<b>Total</b>			<b>424,650</b> <b>(€4,333)</b>

For Concern, one of the main benefits of the partnership with Safaricom was that Safaricom took responsibility for organising the M-pesa agents' arrival on site on the distribution day and for the security of the cash up until the time it was handed over to beneficiaries; any cash lost from the time Concern credited their M-pesa account in Nairobi until the time when beneficiaries received the cash would have been replaced by Safaricom. Essentially Concern were able to do what few cash distribution schemes have been able to do before – that is, contract out the distribution and security of cash to a reputable institution with national presence with the option of managing much of the payments process remotely from Nairobi.

As mentioned on page 13, M-pesa is mainly used in urban areas, so Safaricom had the challenge of organising agents from Iten or Eldoret to travel down to the distribution site in the Kerio Valley on the designated payment day with the necessary hardware, ledger books and cash to service the waiting beneficiaries. Security in Baringo North and Pokot East Districts is not ideal: a large number of Pokot live in adjacent areas and they are well known for carrying firearms and infamous for their cattle raiding and banditry (indeed, many of the households targeted under this programme had their livestock stolen by Pokot raiders). Any distribution be it food or cash would have been at risk from hijacking, but it is arguable that cash was a safer option as it was a less visible target; indeed a million shillings can be carried in a large briefcase in a 4x4 which can travel at relatively high speeds on the poor roads, while heavily laden food trucks travel slowly and are an obvious target.

Nevertheless, clearly the safe transport and distribution of over one million shillings per distribution had to be planned with care. The risk of hijacking was reduced on the first distribution by carrying armed police in the vehicle. Kinyach police station was used as the distribution point on both distributions. As well as good security, the police post - by virtue of its location on top of a hill - offered somewhat stronger Safaricom network coverage than the surrounding area. Only two distributions were planned, but in the event each tranche of cash took more than one day to distribute (the reasons are covered in section 4.6).



## **4. PROCESS FINDINGS**

### **4.1 Project Inception**

Concern began working with the DoE in formal IDP camps in January 2008. Once a working relationship had been established at this level, both parties were able to explore collaboration in other areas, and it was then that the DoE brought the situation in Kerio Valley to Concern's attention. The DoE has had an operational presence in the Valley since 2001 where it has been working with the different communities on peace building and advocacy initiatives. In mid January peace monitors informed DoE staff that about 300 households (1,800 people) had moved to Kinyach police station for safety and were in urgent need of food and water. With Concern's support, the DoE were able to respond immediately with 4,500kg maize, 3,000kg beans and transport to fetch water. After this first food distribution Concern conducted an assessment which found that cash distributions were a viable option and it was decided to trial the M-pesa system as a way of further supporting affected communities to meet their transient food shortages.

### **4.2 Coordination Between Partners**

Three organisations were involved in KVCTP – Concern Worldwide Kenya, The Diocese of Eldoret and Safaricom. Interviews with representatives of each organisation found that coordination between the three was good and staff made a real effort to ensure that the objectives of the project were met. Safaricom in particular worked hard to fast track the bulk payments technology required to make cash payments of varying sizes to a relatively high number of beneficiaries. Prior to the KVCTP the bulk payments software had only been used to pay the winners of prize draws but was untested for larger numbers of recipients so needed some fine tuning in order to serve the purpose required by Concern.

### **4.3 Communication of Project Objectives to Target Communities**

Information about the forthcoming intervention was disseminated through local leaders in the target areas. To a lesser extent parish priests were used to alert people that assistance would be forthcoming. The DoE has good contacts and presence in the area and it appears that the communication process went as well as could be expected. Inevitably, some people – generally those who had fled to distant parts – heard about the intervention too late to be considered for the registration process. In many cases they were worse or just as badly off as those who were selected as they had lost a high proportion of their livestock and their homesteads had been burnt or destroyed by termites in their absence. As a pilot, KVCTP was not designed to address the needs of all the people affected by the post election violence.

### **4.4 Targeting and Registration of Beneficiaries**

Selection of eligible households was carried out by local leaders and representatives - who were themselves selected by the wider community - following a process ascribed by Concern. Leaders were told to first identify potential beneficiaries in their sub-location based on the following criteria: -

- Persons must have been affected by the post election violence (must have lost most of the livestock and other property during the raids).
- The most vulnerable groups must be given priority (the sick, elderly, and widows, lactating and pregnant mothers, the disabled etc).
- Households hosting other families who have been displaced or affected must benefit.

Using the original food distribution lists as a starting point, a second list was drawn up ranking households in order of vulnerability. The list also identified the name of the

matriarch and how many members were in each household. Community members were given the opportunity to comment on the leaders rankings in a public meeting. There was apparently little disagreement on the ranking of the households, but a fair amount of discussion on the size of households, as some had counted members who were living elsewhere.

As the transfer was calculated per individual not per household, it was only after Concern had calculated the number of individuals that their budget would cover that leaders were told how many households would be targeted from their respective lists. The small size of the pilot meant there was a large amount of exclusion from the programme. No inclusion errors (households who did not meet the qualifying conditions receiving the transfer) were detected in the course of this review.

Beneficiary households were told that they were receiving the cash transfer under the following conditions: -

- Assistance to be given irrespective of ethnic, religious and social backgrounds.
- Targeted recipients of the intervention will be women.
- The money should not be used for brewing illicit drinks. The primary focus of spending should be buying food.
- Assistance should not generate conflict between husbands and wives and other members of the family.
- Assistance is only for a short period of time

It would appear that by and large beneficiaries adhered to these conditions (see sections 4.8 and 4.9).

#### **4.5 Timeliness**

Given that the post election violence took place in December and January (interviewees reported a particularly bad spell of raiding in mid January) it could be argued that the cash arrived somewhat late. However, Concern and the DoE targeted the area with one emergency food distribution in March and the situation of the affected communities by the time they received the first transfer was as bad, if not worse, than in January: Although there was relative peace, food prices had spiralled and drought had severely impacted on their ability to produce their own food.

In terms of impact for this intervention timeliness is not as important an issue as duration. This issue is dealt with in more detail in section 5.1 – *Impact on Household Food Security*.

#### **4.6 Cash Distributions**

##### **4.6.1 Beneficiary travel times and associated costs**

Although, in theory, once they had received their credit message beneficiaries were able to collect cash from any M-pesa agent, in practice most of them used a single distribution point – Kinyach police station – where Safaricom arranged for an agent to be posted on the given distribution day. The targeted communities were all located within a 20km radius of the distribution site but for a number of reasons the process of collecting the cash took most recipients an entire day.

The first factor contributing to time taken was the distance from the beneficiary's home to the police station. For many of the beneficiaries walking is the norm and they are used to covering large distances on foot, but the distances were more problematic for the frail and elderly; one particular woman named Taleh interviewed in Kalabata spent five hours slowly walking to the police station and five hours back again after she had waited to collect her money. Ironically, the modification made to the programme after the first

transfer, whereby each beneficiary was issued with their own SIM card, actually meant that Taleh became worse off in terms of opportunity cost. Under the first distribution she had been part of a group and the group representative had travelled to the distribution site on the group members' behalf to collect the money and apportion it accordingly on return to Kalabata. Having her own SIM card with associated security features meant that she had to make the journey herself to collect the second transfer – hence the ten hour round trip. In some cases where recipients were unable to travel to the distribution site special arrangements were made to enable a representative or more able bodied family member to collect cash on that person's behalf. This system was ad-hoc in nature but worked well because, as in many rural areas, people knew whether the beneficiary's representative was bona fide or not, so were able to vouch for them at the distribution site.

Beneficiaries were advised in advance the day on which their credit messages were sent and were told to assemble at the distribution point on that particular day in order to redeem their credit with the M-pesa dealer. Most women started their journey first thing in the morning on the appointed day and arrived at different times throughout the day depending on distance and their physical ability. However, many faced a hold-up once at the police station caused by either waiting for the credit message to arrive on their phone and/or waiting to access a handset to check whether their SIM card had been credited.

Once they reached the front of the queue transactions took about three minutes to complete and the beneficiary could begin the journey back home, but for all intents and purposes the actual task of collecting the cash required an entire day for most beneficiaries.

It should be noted that in terms of time taken to collect the transfer the choice of cash was no different to food a food distribution where beneficiaries also spend most of the day queuing for their ration and then organising to transport it back to their homes. Cash is obviously much easier to transport than the equivalent amount of food so beneficiaries were spared the return journey carrying upwards of 20kg of food stuffs with them. However, the cash had to be transferred into food at some point, requiring one or more trips to and from the market. While in theory cash recipients could buy quantities of food Dearwhich were easily carried by one person this would entail multiple journeys; in practice beneficiaries generally made one trip, buying as much food as their cash would allow on that day, then used a portion of the cash to pay for transport back home if necessary.

#### **4.6.2 M-pesa agent travel times and associated costs**

The KVCTP utilised the services of two M-pesa agents – one for the first transfer and another for the second.

The first agent was based in Iten – about 40km from Kinyach. It took this agent three round trips to complete the first distribution because of the problems with credit text messages not arriving on the specified day, poor cellphone reception at the distribution point which increased the time needed to complete each transaction, beneficiaries not showing up and beneficiaries losing SIM cards (causing a bottleneck as each lost card takes five minutes to reissue assuming the beneficiary has the SIM certificate). The first agent was unable to participate in the second distribution because he had to attend a funeral.

For the second distribution an agent from Eldoret was used. He travelled the 120km to the distribution point at Kinyach on the morning of the day of the scheduled transfer and handled 140 transactions on that day. He and his team stayed in Aror overnight (at Concern's expense) and completed the remaining transactions (other than those who had lost their SIM cards) on the following day – a total of KSh1,048,993 transferred through about 500 transactions in two working days.

A rough calculation of the agents' probable revenues and profits from involvement in the KVCTP is presented in table 4 below.

<b>Table 4: Agent Profit / Loss Calculation</b>		
<b>Item</b>	<b>Agent 1 – Iten (1<sup>st</sup> distribution)</b>	<b>Agent 2 – Eldoret (2<sup>nd</sup> distribution)</b>
1. Estimated fuel costs	2,400/= (40km x 6 = 240km. Vehicle uses 1 litre of fuel per 10km. Fuel at 100/= per litre)	2,200/= (110km x 2 = 220km. Vehicle uses 1 litre of fuel per 10km. Fuel at 100/= per litre)
2. Commission	5,546/= (75% of receiving fee of 145/= x 51. Assuming that 510 beneficiaries were grouped into 51 clusters of 10 with each cluster receiving 19,200/=)	9,562.5/= (75% of receiving fee of 25/= x 510)
3. Potential profit / loss (Item 2 – Item1)	3,146/=	7,362.5/=

#### 4.6.3 The issue of lost and non-activated SIM cards

Two main issues affected the prompt transfer of cash from Concern to beneficiaries providing important lessons for future programming. The first was beneficiaries losing their SIM cards, the second was beneficiaries being issued with inactivated cards.

Normally when a SIM card is lost the owner takes the SIM certificate to an agent who can then activate another card within a matter of minutes. The problem that beneficiaries in Kerio Valley encountered was that they could only easily access an agent on the day of distribution so had to get the new card issued on the distribution day when they had access to the agent. Fortunately the cash distribution process for the bulk of beneficiaries was not held up as the agents delegated a staff member to deal with lost cards in a separate queue.

In some instances the beneficiary had lost the SIM certificate as well as the card, in which case an entire new card had to be issued, loaded with airtime, and registered for M-pesa, a process which could only realistically take place in Iten or Eldoret where agents have access to the M-pesa database. Beneficiaries who lost their SIM and SIM certificate faced a delay in receiving payments while their new card was processed. At the time of writing this report there were still some beneficiaries who had not received their total entitlement because of this reason; it is not clear how they will get their money, but Concern is considering sending the transfer to another beneficiary on their behalf.

A surprisingly high number of SIM cards were issued without their default settings having been removed. This problem was associated with a particular batch of cards with the 0731 prefix and was purely bad luck. Normally, when a new SIM card is loaded with airtime the default call-barring settings are automatically removed allowing text messages and calls to be received. In about 50% of cases (according to the Safaricom representative interviewed) beneficiaries were issued with cards which were not activated and therefore unable to receive the M-pesa SMS sent by Concern. These cards had to be taken to a customer care centre in Eldoret for activation.

#### 4.6.4 Summary of other problems encountered

Issues affecting smooth execution of the pilot are explored in table 5 below.

<b>Table 5: Summary of problems affecting cash distributions</b>		
<b>Issue</b>	<b>Potential problem / bottle neck and impact</b>	<b>Rank importance high, medium, low</b>
Charging phone	Chargers had to be shared and some chargers were faulty	L
Receiving cluster text messages	Agent received a lower commission than disbursing transfers to individual M-pesa users, thereby reducing his incentive.	M
	Beneficiaries had to find change to share out the transfer amongst members of the cluster	L
Receiving individual text messages	Took longer to disburse as beneficiaries had to share handsets to insert individual SIM cards	M
Poor phone coverage	Limited the sites at which distribution could take place	M
Lost SIM cards	When the SIM certificate was lost it meant that beneficiaries could not receive their transfers on time. When they had the SIM certificate, new card could be issued but it delayed distribution.	H
Lost ID	Meant that beneficiaries were unable to collect their transfer	M
Illiteracy	Caused delays and added to transaction costs (payment of clerks) as beneficiaries were unable to understand instructions on their phones	L
Lack of change	Agents travelled with notes only – denominations of less than 50/= could not be disbursed to individual beneficiaries.	L

#### 4.7 Fiduciary Risks

##### 4.7.1 Security of cash and beneficiaries on site and in transit

There were three main areas of the programme where physical security was critical – safe transport of the cash to the distribution point, security while distribution was taking place and the safety of beneficiaries returning home from the distribution point with their cash. Security was a real consideration; tribesmen in the area are known to be armed with automatic weapons and, as they proved in January, ready to use them.

As mentioned in section 3.3.3, one of the main advantages of the M-pesa system as far as Concern was concerned, was that Safaricom assumed responsibility for the security of the cash until it was distributed to beneficiaries. The one example the consultant has knowledge of where cash intended for distribution was hijacked with loss of life and cash (an incident in Northern Uganda in 2007) was an inside job where bandits colluded with NGO staff that were on short term contracts and presumably decided to make what they

could while they had the chance. Using the M-pesa system goes a long way towards minimising the possibility of insider mischief; agents are not short-term contract staff, they are entrepreneurs looking to build a sustainable business so have a vested interest in the system working safely. As protection from external threats, Safaricom took the precaution of organising a police escort in the cash vehicle for distributions and, although there was potential for an armed hijack, especially when the vehicles stopped moving to repair punctures, there were no security incidents while cash was in transit. A police escort was used for the first transfer – a service for which the police waived their normal charges. For the second transfer no escort was used.

There were no problems associated with the second area – on site distribution – either. Both distributions took place at the police compound in Kinyach whose perimeter is secured by a high chain-link fence. Armed police were on hand to ensure security in the event of any attack.

Lastly, the consultant found no evidence nor heard any reports of beneficiaries having their cash stolen while travelling back to their villages from the distribution point. Beneficiaries mentioned that they felt safer travelling with cash than they would have had they been transporting food as cash is much easier to conceal.

Safaricom is to be commended for presiding over the incident-free distribution of over two million shillings in one of the more insecure parts of Kenya, but it is possible that if cash transfers were to continue in the same way in the future, bad elements would identify and target a weak link in the cash distribution chain. Safaricom would have to consider varying routines and routes used for the distribution of cash.

#### **4.7.2 Beneficiary Identification**

Concern needed to be sure that it was sending money to the right people – one wrong digit in a phone number would result in the beneficiary not receiving his or her transfer. To help ensure the right people received the money, Safaricom staff facilitated access to a database which allowed names to be linked to phone numbers. Before each distribution Concern would provide Safaricom with a list of each number to which it wished to transfer funds. This list enabled the generation of a list of names which were then manually checked against Concern's list of beneficiaries by two different people. When it was clear that all beneficiaries were associated with a phone number the payment was made.

M-pesa employs a two-factor identification system to ensure that the person receiving the money is the person to whom it was actually sent, and to ensure that, even if the recipient's SIM card is stolen or lost, a third party cannot access funds in an account linked to that card.

The first security feature requires the cash recipient to show the identity document linked to their M-pesa registration when collecting cash (an ID card or passport). Before dispensing the cash the M-pesa agent confirms that the recipient's ID number matches that sent through to his phone. All transactions and ID details are recorded in the agent's log book giving a hard paper trail of all transactions as well as the electronic records stored on the main computer in Nairobi. Some of the KVCTP beneficiaries had lost their ID cards during the political violence so their husbands registered as the beneficiary and handed the cash over to their wives on receipt. The consultant found no problems associated with this system, although it is likely that it resulted in more than one household member making the journey to the distribution site on distribution days.

Assuming their ID is in order, each beneficiary must, as a second security step, enter a unique Personal Identification Number (PIN) before cash is handed over. The potential for beneficiaries forgetting their PIN was minimised by instructing them to use their year of birth. While this arguably reduces security somewhat, no problems associated with PINs were reported or identified over the course of this survey.

#### 4.8 Control of Cash

Concern and the DoE placed a strong emphasis on 'branding' the programme as being an intervention specifically designed for women to buy food for the household. Wherever possible (identity documents permitting) the matriarch of the household was registered as the recipient of the cash. Other than the fact that some women needed their husbands to register for and collect the cash because they had lost their own identity documents, there appeared to be no problems with this targeting arrangement. In fact, experience from cash transfer programmes in Kenya and other countries in SSA suggested that there was little risk of intra-household conflict over the control of the cash resources. It is also likely that the branding exercise and the relatively small amounts of cash transferred (not enough to buy significant numbers of livestock) helped to deter men from asserting control over the cash.

#### 4.9 Use of Cash

The evaluation did not provide time for a statistically significant survey of beneficiaries, but an attempt was made to ascertain how cash was used by conducting proportional piling exercises with 11 beneficiaries: this information is presented in table 6 below. As the table shows, at least 70% of the total cash distributed was spent on food items, nearly half of which comprised the staple maize. Other food items purchased included beans, oil, tea, sugar, fruit and vegetables. The beneficiaries interviewed reported using an average of 17% of their transfer on costs related to transport. In a few instances these costs comprised fares for motorised transport but, as most journeys were made on foot, they largely consisted of payments for labour to carry food back from the market, or food purchases for children accompanying them on the journey. Around 12% of the transfer was used for other purposes including milling, paraffin, loans or gifts to friends and relatives or savings.

<b>Table 6: Use of Cash Received by Beneficiary Households</b>				
	<b>Item of Expenditure</b>			
	<b>Maize</b>	<b>Other Food</b>	<b>Transport*</b>	<b>Other</b>
<b>Average proportion of transfer used by the 11 women interviewed</b>	47%	23%	17%	12%
<p>Notes: -            * Motorised transport was only used in a few cases. Money allocated under this category was mainly used to pay people to carry food purchases back to the village or to buy food on the journey.  <b>Figures are calculated from responses of ranking exercises with 11 women distributed across all four target locations</b></p>				

Beneficiaries were given strong messages that the cash should be used for food, and it appears that these instructions were followed although the diversity of food stuffs and non-food essentials purchased demonstrates the advantage of flexibility that cash has over straight food transfers. Indeed, many beneficiaries were able to use a proportion of the cash to replace non-food household essentials such as cooking pots and utensils which had been lost. No incidents of misuse of the transfer were discovered or reported during the fieldwork.

#### 4.10 Appropriateness of KVCTP

Two issues must be looked at when considering the project's appropriateness: The suitability of cash *per se* to beneficiaries' circumstances, appropriateness of the size of the transfer as regards beneficiaries' needs and the appropriateness of the frequency of the transfer.

#### **4.10.1 Appropriateness of cash**

Cash plays an important role in the household economy of the targeted communities. Livestock are sold to provide money for staple foods, school fees and medical bills and women engage in cash-in-hand casual labour when necessary. Markets, although quite widely spread out and only operational in most locations on a couple of days per week, offer a range of basic food stuffs and their timings and locations were familiar to beneficiaries. Therefore, cash was culturally appropriate in as much as its value and utility was fully understood by those who received it.

As already mentioned, it was beyond the scope of this review to conduct a statistically significant survey of beneficiaries' preferences for food or cash, however, informants interviewed as part of this review were asked whether they would have preferred cash or food aid had they had a choice in the content of the transfer. Asking this type of question is fraught with difficulty as there are problems with translating quantities of cash into quantities of food, and respondents usually state a preference for whatever they have most recently received either out of politeness or in the expectation that more will be forthcoming. Nevertheless, a quick straw poll of assembled beneficiaries in the sites visited revealed that, while most expressed a preference for cash, some, particularly the older members, would have preferred food presumably because it would have entailed one journey to the distribution site rather than two journeys (one to the site and a second to the market).

Concern's use of M-pesa allowed a food security intervention to be executed at minimal opportunity cost to themselves. Whereas a traditional food distribution would have meant that Concern would have had to source, procure, store, transport and distribute the food, under KVCTP these functions were passed on to the beneficiary. While for many households, the time costs associated with collection of cash and purchase of food were acceptable, for a minority of less able bodied beneficiaries from households with limited labour availability, they were not. Clearly solutions have to be found to make the system more appropriate to the circumstances of the most vulnerable (see section 7).

#### **4.10.2 Appropriateness of size of transfer**

Concern's intention was to provide targeted households with the cash to purchase 50% of their minimum monthly food requirements (assuming 100% of the transfer was spent on food and not accounting for the fact that children in the household were allocated an 'adult sized' transfer of 320/=). As mentioned in section 3.3.2, the provision of 640/= per household member per month seemed reasonable considering that in 2006 KIHBS found that the adult-equivalent food poverty line in the Rift Valley was 984/= per month. The problem was that the transfer was based on the prices in Aror market in early April but, by the time beneficiaries received their first distribution in early June, prices had risen considerably. For example, maize was selling for 20/= per kilo in April but 30/= per kilo in early June – an increase of 50%, while the price of beans reportedly doubled over the same period.

Given the rapid inflation experienced, the fixed-size transfer was quickly reduced to the equivalent of significantly less than 50 percent of households' minimum monthly food requirements - a finding corroborated by most beneficiaries interviewed, who reported that the food bought with each transfer lasted for just a few days, rather than the full week intended by Concern. It can therefore be concluded that the transfer size was not sufficient to provide half of targeted households' food needs as originally intended by Concern.

The impact of the erosion of the transfer's purchasing power on household food security and future vulnerability is explored in section 5.

The clan based structure of villages and strongly entrenched intra-community sharing norms further eroded the nutritional impact at a household level, as food purchased and,



to a lesser extent, cash received was shared with non beneficiary families. It is practically impossible nor would it be desirable to eliminate this practice; sharing of resources between households is a kind of insurance mechanism and plays an important role in strengthening community ties and household-level social capital. Cash recipients were empowered through the opportunity to become benefactors and this empowerment in itself was an important benefit of the intervention. Experience from other cash transfer programmes suggests that household-level nutritional intake is eroded less through sharing in the case of cash transfers than it is in the case of a straight food distribution; food tends to be shared more freely than cash and cash is more easily concealed in the home than food.

#### **4.10.3 Appropriateness of the frequency of the transfer**

The size of each transfer was calculated to provide 25% of an individual's monthly food needs. The plan was to make two transfers, the second one happening two weeks after the first, thereby providing beneficiaries with a monthly transfer sufficient to buy half of their minimum food requirements. Despite various technical hitches, Concern managed to facilitate the two distributions more or less as planned – the first one took place on the 10<sup>th</sup> May, the second on the 29<sup>th</sup> May. Predictability of the timing and size of cash transfers is important as it allows beneficiaries to plan their expenditure.

Concern could have saved about 2,550/= in transaction charges (5/= per transaction) and possibly avoided some of the impact of rapid price inflation by bundling each beneficiary's allocation into one single monthly transfer rather than two. However, to do so would have significantly reduced the opportunity for learning from the pilot.

The impact of the short duration of the programme on household food security and future vulnerability is explored in section 5.

#### 4.11 Adherence to SPHERE Standards

Table 7 below, shows the extent to which KVCTP met the relevant SPHERE standards.

<b>Table 7: Adherence to Applicable SPHERE Standards</b>		
<b>SPHERE Theme</b>	<b>SPHERE Standard</b>	<b>Comment</b>
<b>Assessment and Analysis</b>	<p><b>Standard 1: Food Security</b></p> <p>Where people are at risk of food insecurity, programme decisions are based on a demonstrated understanding of how they normally access food, the impact of the disaster on current and future food security, and hence the most appropriate response.</p>	<p>Concern and the DoE had a sound understanding of the causes of food insecurity and the role of that the market plays in servicing food requirements.</p> <p>The extent to which purchasing power would be eroded by inflation was underestimated significantly. The impact of drought was also not factored in, although the extent to which these issues could have been addressed were most likely limited by funding constrains</p>
	<p><b>Standard 2: Nutrition</b></p> <p>Where people are at risk of malnutrition, programme decisions are based on a demonstrated understanding of the causes, type, degree and extent of malnutrition, and the most appropriate response.</p>	<p>Statistics on the extent and severity of malnutrition were either not available or not used at the time of the intervention. However, cash enabled beneficiaries to buy a diet more diverse than that which could realistically have been delivered through food aid</p>
<b>Food Security</b>	<p><b>Standard 1: General Food Security</b></p> <p>People have access to adequate and appropriate food and non-food items in a manner that ensures their survival, prevents erosion of assets and upholds their dignity.</p>	<p>Provision of cash allowed the purchase of food and non food items, but reduced purchasing power meant that the amounts of food available to households were insufficient to cover their needs.</p> <p>Asset sales were uncommon by virtue of the fact that many had lost most of their assets before the start of the programme.</p> <p>Interviews with recipients found that there was a certain level of prestige associated with receiving and being in control of the cash transfer; something rarely observed in beneficiaries of food handouts.</p>
	<p><b>Standard 2: Primary Production</b></p> <p>Primary production mechanisms are protected and supported.</p>	<p>In the affected area livestock and limited crop production are the main sources of food. Neither of these were supported by the programme. It could be argued that the injection of cash into the area created demand for produce although this review did not investigate this hypothesis.</p>
	<p><b>Standard 3: Income and Employment</b></p> <p>Where income generation and employment are feasible livelihood strategies, people have access to appropriate income-earning opportunities, which generate fair remuneration and contribute towards food security without jeopardising the resources on which livelihoods are based.</p>	<p>The emergency nature of the programme and the additional costs that creating employment would have entailed mean that this standard is not applicable in the case of KVCTP.</p>

<b>Table 7: Adherence to Applicable SPHERE Standards</b>		
<b>SPHERE Theme</b>	<b>SPHERE Standard</b>	<b>Comment</b>
	<p><b>Standard 4: Access to Markets</b></p> <p>People's safe access to market goods and services as producers, consumers and traders is protected and promoted.</p>	<p>The provision of cash to be spent on food clearly supported the market traders and the beneficiaries themselves. The extent to which non-beneficiaries were negatively impacted by price hikes because of a sudden spike in effective demand is unclear.</p>
<b>General Nutrition</b>	<p><b>Standard 1: All Groups</b></p> <p>The nutritional needs of the population are met.</p>	<p>This standard is of more relevance to food distributions; a major strength of cash programming is that beneficiaries are able to buy a diverse range of foods which cover their nutritional requirements.</p>
	<p><b>Standard 2: At-risk groups</b></p> <p>The nutritional and support needs of identified at-risk groups are met.</p>	<p>KVCTP placed emphasis on targeting the most vulnerable in the community.</p>
<b>Food Aid Management</b>	<p><b>Standard 3: Distribution</b></p> <ul style="list-style-type: none"> <li>• The method of food distribution is responsive, transparent, equitable and appropriate to local conditions.</li> <li>• Recipients of food aid are identified and targeted on the basis of need, by means of an assessment carried out through consultation with stakeholders, including community groups</li> <li>• Efficient and equitable distribution methods are designed in consultation with local groups and partner organisations, and involve the various recipient groups</li> <li>• The point of distribution is as close as possible to recipients' homes to ensure easy access and safety</li> <li>• Recipients are informed well in advance of the quality and quantity of the food ration and the distribution plan</li> <li>• The performance and effectiveness of the food aid programme are properly monitored and evaluated</li> </ul>	<p>Community members perceived the cash distribution to be transparent and equitable. The remoteness of the target area and the capability of some of the recipients posed some difficulties, but these were not insurmountable.</p> <p>Community-Based Targeting was used for the selection process.</p> <p>More of the costs of distribution (mainly in terms of travel times and waiting for the transfer and then travelling to the market to buy food) were transferred onto the recipients than in a normal food distribution, but the choice of distribution site was the best choice given the locations of the beneficiary communities.</p> <p>The review found that instructions regarding the size and collection of the transfer were well communicated.</p> <p>This review is evidence of Concern's commitment to thorough monitoring and evaluation.</p>

## 5. IMPACT FINDINGS

### 5.1 Impact on Household Food Security

There is no doubt that the programme temporarily increased beneficiaries' food consumption and the assistance was appreciated not just by the direct recipients, but also by members of the wider community from which beneficiaries were selected. One non-beneficiary explained the difference between households that received the transfer and those who did not as '*in those households there is life, with us there is nothing*'.

Concern did not specify any impact objective other than providing households with the cash to buy 50% of their minimum food needs for one month, while at the same time trialling a new technology.

Unfortunately, because of food price inflation, KVCTP was unable to meet its target of 50% of beneficiaries minimum food needs. The Kenya National Bureau of Statistics (KNBS) calculated that in 2006 (the most recent data available) the adult equivalent food poverty line in rural Kenya was an average of 988/= . That is to say, each member of a rural household would require 988/= to purchase their minimum calorific and nutritional requirements - i.e. a balanced diet providing a minimum of 2,250kcal per adult equivalent per day. Accounting for inflation of about 9% a year (CIA figures) since the KNBS survey, the monthly food poverty line at the beginning of 2008 can be conservatively estimated as 1,174/= per household member.

The consultant estimates that price increases resulting from the post-election violence, global supply constraints and rising transport costs added at least an additional 50% to the cost of buying minimum calorific needs between January and May 2008, raising the minimum monthly cash requirement to 1,761/= per adult equivalent household member at the time of writing this report. Given this scenario, the KVCTP was sufficient to purchase only a third of minimum calorific requirements if the entire transfer was spent on food. As already noted in section 4.9, beneficiaries actually spent about 69% of their transfer on food, meaning that, over the course of the month for which it operated, the programme in reality provided households with about 25% of their minimum monthly calorific requirements.

Budget constraints probably meant that there was little Concern could do to mitigate the effects of inflation. However, the signs that prices would rise were available and could have been factored into the size of the transfer funds permitting. The April FEWSNET report, for example stated that between December and March there was a 20% increase in grain prices in deficit production areas and that less than 50% of the land usually used for maize cultivation had been prepared for the 2008 season.

### 5.2 Impact on Market Prices

The survey found strong anecdotal evidence (corroborated by interviewees from two different villages) that the increased effective demand produced by the cash transfers had the effect of raising the price of maize in Aror market – the place where most of the beneficiaries spent their cash. The extent to which vendors raised prices as a result of increased demand is not fully clear – one group in Kinyach reported that the price of maize rose from 30/= to 35/= (16%) on the first distribution day, while in Ayatia interviewees claimed that prices were increased by 60% (from 50/= to 80/= per kilo). However, it is unlikely that the 60% increase reported is entirely attributable to dealers taking advantage of the surge in demand – while market inefficiencies certainly contributed to some of the inflation, the larger proportion of was a reflection of the global rise in grain prices over the project period.

### **5.3 Impact on Non-Beneficiaries and Intra Community Dynamics**

Within the tribal groupings interviewed there appeared to be a strong sense of community; indeed many of the villages a clan based and mutual support is a firmly established coping mechanism. So it was not surprising that practically all non-beneficiaries interviewed reported that they had benefited from the programme in some way. In most cases benefits came in the form of the gift of a small amount of money (up to 100/=) a few kilos of flour or some sugar or tea. It is unlikely that this assistance had any measurable effect on the recipient's nutritional status, but the impact on community cohesion and building of social capital is significant. Beneficiaries who share food know that they may also be gifted food if they are not official beneficiaries of assistance next time round.

### **5.4 Impact on Gender Relations**

KVCTP was branded as a product for women - wherever possible transfers were made in a woman's name which, for many beneficiaries, was the first time the importance of their productive and maintenance roles had been formally recognised.

The intervention clearly stressed on the need for women and men to negotiate at the household level on expenditure priorities and, as the women ostensibly controlled the cash transfer, provided a rare opportunity for wives to discuss with their husbands matters that impact on all their lives. Traditionally men make decisions about the use of resources unilaterally and may choose to inform or ignore their womenfolk. On the negative side, however, this empowerment may have served to reinforce the woman's normal role of tending to the daily upkeep of the household. As the women were normally registered to collect the cash it was them who were burdened with the long walk to collect it and purchase food from the market, although it should be added that the women interviewed for this evaluation were in no way resentful of this. While the project probably had little impact on deep seated gender roles, women's role as efficient managers was made more visible. Women's confidence and self esteem was also heightened as they showed they were able to use the resources given to them for the benefit of their entire families and strengthen inter-community ties by assisting other women with gifts of food or money.

### **5.5 Impact on M-pesa Agents and Safaricom**

The project was not designed with M-pesa dealers in mind as beneficiaries, but clearly, if M-pesa is to be used to distribute cash in remote areas there must be sufficient incentive to persuade an agent to make the journey to serve the beneficiaries.

As mentioned in section 4.6, two different M-pesa agents were used for the pilot's two transactions. The first one based out of Iten had to make three separate return trips down into the valley in order to complete the payments because of the problems with SIM cards. It is estimated that the agent made just over 3,000/= after allowing for fuel costs. Obviously, had the technology worked as intended he would have made this in one rather than three days. The first agent would have also made more in commission if the cash had been distributed to individuals rather than to groups.

The second transfer went more smoothly: the dealer and his team managed to complete the distribution in two days, spending the night in Arror. It is estimated that he made around 7,300/=; this was more than the first agent largely because he got the larger amount of commission associated with distributing to individuals rather than to groups. The agent reported that he was very happy with the scheme and would be keen to stay involved in the future.

The Pilot provided Safaricom with an opportunity to trial the practicality of M-pesa in a remote location and to iron out glitches in its bulk payment facility.

## **5.6 Impact on Market Traders**

It was beyond the scope of this study to evaluate the impact on market traders, but Davies (2007), evaluating the multiplier effect of a cash transfer programme in Malawi provides this description of the regional multiplier:

“An injection of cash from outside a region will have several effects depending partly upon its uses. If some of the cash is used to purchase goods or services produced within the region, this will have the effect of stimulating demand locally. So, for example, a household which received \$100 of Concern cash may choose to spend \$50 of this money on farming tools produced locally. The effect is to stimulate local production, and means that the producer’s income has increased by \$50. The total increase in the income of the region is thus the initial \$100 plus the \$50 earned by the tool-maker; a total of \$150 after one round of spending. There is, of course, no reason to assume that spending ends there. In turn, the tool-maker will spend his money. If he also spends half of his income locally, this will help to generate the further production of local goods and services by \$25, so that the total impact on the region is \$175.”

He goes on to estimate the regional multiplier for the Malawi project (Dowa Emergency Cash Transfer) as being between 2.00 and 2.79, meaning that for every unit of income injected by the DECT project into the local economy an additional ‘value-added’ of at least double this amount was created. There should be no such effect from food aid, if one assumes that no food aid is converted to cash. In practice a proportion of food aid will typically be converted to cash, but the multiplier effect will be significantly smaller.

## **5.7 Other Impacts on Beneficiaries**

The consultant received anecdotal reports of tension between conflicting tribes being reduced as various families came to the same distribution point to receive cash. The cell phones have also helped beneficiaries stay in touch with distant friends and family and have given one community the means of establishing an early warning system (and presumably a means of contacting the police) against cattle raiders.

The programme, with its combination of technology and cash, also had the effect of transforming beneficiaries from passive recipients of aid to participants in a programme in which they learned new skills and were empowered with a choice of how to use the cash. Basically, the process by which assistance was delivered, while not as important as the assistance itself, was of significant benefit to participants.

## **6. COMPARISON WITH STRAIGHT FOOD DISTRIBUTION**

It is beyond the scope of this evaluation to conduct a full cost-benefit analysis of the KVCTP, however, a basic comparison of the pilot with a food distribution carried out with the same level of funding and at the same time of year is presented in table 8 on the following page.

The scenario presented makes the following assumptions: -

- The calculations focus solely on an intervention's ability to provide calories, not any other impacts (empowerment, for example).
- Under a food distribution all maize and beans were procured in May when prices were at 20/= and 53/= per kilo respectively. Prices of maize and beans are wholesale in Eldoret collected by the Ministry of Agriculture.
- It is assumed that in the case of cash all cash is spent on food and none of the food purchased is shared or gifted to people outside the immediate household. In reality this was not the case – only about 70% of cash was spent on food and sharing did take place.
- Food storage and fumigation costs used are those quoted by the National Cereal Produce Board for storage and fumigation in Eldoret
- Transport costs remain constant although, in reality, rising fuel prices may have had the effect of increasing this budget line
- All cash distributed was spent on maize and beans at an average cost of 25/= and 59/= per kilo respectively. The figures used are the average of the prices paid by beneficiaries for maize and beans after each distribution. (Data collected by Concern staff).
- Administration costs are assumed to be approximately the same for each distribution so they have been omitted from the calculations.
- Phones and chargers, etc. were retained by beneficiaries so the costs associated with them are considered as a direct transfer to beneficiaries.
- Multiplier impacts on the local market as a result of cash transfers are not considered
- Overall project costs are the same

As table 8 shows, the scenario presented reckons that under the food distribution beneficiaries would have received an additional two days of minimum calorific requirements – a result of buying the food wholesale and the costs associated with equipping beneficiaries to receive funds through M-pesa.

Table 9 (page 33) makes a comparison between the KVCTP excluding the equipment costs, and a traditional food distribution using the same amount of money that was transferred to beneficiaries. Under this scenario recipients of cash would have been able to purchase one more day's worth of minimum calorific requirements even though they would have been paying retail rather than wholesale prices. This demonstrates that, even when the difference between wholesale and local market prices is accounted for, there is a point (relating to the relative costs of cellphone equipment and food transport) at which transferring cash through M-pesa represents better value in terms of calories provided per shilling spent than a traditional food distribution. In the case of KVCTP, however, the savings possible through longer-term programming were never realised because of the short duration of the pilot.

<b>Table 8: Relative Costs of KVCTP and 'Traditional' Food Distribution per person</b>				
<b>Item</b>	<b>Cash Transfer</b>		<b>Food Distribution</b>	
	<b>KSh</b>	<b>Euro equiv (1€ = 98KSh)</b>	<b>KSh</b>	<b>Euro equiv (1€ = 98KSh)</b>
SIM cards	20,000	204	-	-
Hand sets	103,500	1,056	-	-
Solar chargers	210,000	2,143	-	-
Airtime	10,000	102	-	-
Adapters	1,050	11	-	-
Cost of making transactions (estimate)	56,100	572	-	-
Supervision costs (Concern & DoE staff, clerks and security)	91,000	929	91,000	929
Transport of food (90 tonnes at 2,720 per tonne)	-	-	253,800	2,590
Cash transfers	2,876,480	29,352	-	-
Bulk procurement of 58.4 tonnes maize at 20/= per kilo (May 2008)	-	-	1,168,000	11,918
Bulk procurement of 30 tonnes pulses at 53/= per kilo (May 2008)	-	-	1,590,000	16,224
Loading / unloading fees	-	-	91,067	929
Distribution vehicle rental	-	-	160,000	1,633
<b>Total project costs</b>	<b>3,368,130</b>	<b>34,369</b>	<b>3,353,867</b>	<b>34,223</b>
<b>Alpha ratios and calories provided</b>				
	<b>Cash transfer</b>		<b>Food transfer</b>	
Percentage of project expenditure accruing directly to beneficiaries)	96		82	
Estimated quantity of maize bought with cash transfer at 25/= per kilo, or bulk procurement at 20/= per kilo (tonnes)	58.4		58.4	
Estimated quantity of beans bought with cash transfer at 59/= per kilo, or bulk procurement at 53/= per kilo (tonnes)	24		30	
Estimated calorific value of total transfer per household (500 households) (maize = 353kcal per 100g; beans = 314kcal per 100g)	563,024		600,704	
Number of days minimum calorific requirements (2,250 kcal per adult equivalent per day) provided for family of 6	42		44	



<b>Table 9: Relative Costs of KVCTP and 'Traditional' Food Distribution per person Excluding Equipment and Transfer Costs</b>				
<b>Item</b>	<b>Cash Transfer</b>		<b>Food Distribution</b>	
	<b>KSh</b>	<b>Euro equiv (1€= 98KSh)</b>	<b>KSh</b>	<b>Euro equiv (1€= 98KSh)</b>
Cost of making transactions (estimate)	56,100	572	-	-
Supervision costs (Concern & DoE staff, clerks and security)			91,000	929
Transport of food (90 tonnes at 2,720 per tonne)	-	-	228,702	2,334
Cash transfers	2,876,480	29,352	-	-
Bulk procurement of 58.4 tonnes maize at 20/= per kilo (May 2008)	-	-	1,168,000	11,918
Bulk procurement of 22.7 tonnes pulses at 53/= per kilo (May 2008)	-	-	1,203,100	12,277
Loading / unloading fees	-	-	83,118	848
Distribution vehicle rental	-	-	160,000	1,633
Total project costs	2,932,580	29,924	2,933,920	29,938
<b>Alpha ratios and calories provided</b>				
	<b>Cash transfer</b>		<b>Food transfer</b>	
Percentage of project expenditure accruing directly to beneficiaries)	98		81	
Estimated quantity of maize bought with cash transfer at 25/= per kilo, or bulk procurement at 20/= per kilo (tonnes)	58.4		58.4	
Estimated quantity of beans bought with cash transfer at 59/= per kilo, or bulk procurement at 53/= per kilo (tonnes)	24		22.7	
Estimated calorific value of total transfer per household (500 households) (maize = 353kcal per 100g; beans = 314kcal per 100g)	563,024		554,860	
Number of days minimum calorific requirements (2,250 kcal per adult equivalent per day) provided for family of 6	42		41	

## 7. MOVING FORWARD AND RECOMMENDATIONS

### 7.1 Size of Transfer

Concern accurately calculated the cash needed to buy 50% of minimum daily calorific requirements at the start of the intervention. Unfortunately steep food price inflation between the time when the size of the cash transfer was set and the transfers actually began served to reduce beneficiaries' purchasing power to the extent that the transfer could only buy about 25 – 33% of minimum daily calorific requirements.

It is **recommended that in future Concern consider linking the size of the transfer to the price of a basket of staple foods**. In addition, it is **recommended that early warning data be considered when establishing the size of cash transfers**; there were indications as early as February that prices were set to rise, but these appear not to have been considered when setting the size of the transfer.

### 7.2 Delivery of Transfer

The value of M-pesa as a mechanism for sending money between urban centres is already recognised, but the KVCTP proved that, given the support of Safaricom in the mobilisation of agents to remote distribution points, M-pesa is a cost effective and secure way of delivering cash transfers to people living in rural areas. The transaction cost of delivering two transfers to each of over 500 households was about €571 – far cheaper than a manual cash distribution.

In many ways the issues relating to the choice of food distribution site (eg security and distance from recipients' houses) are applicable to cash transfers, but cash, because of its extreme portability gives the opportunity of a far more flexible distribution system. It is **recommended that future M-pesa cash transfer schemes should consider ways of making the collection of cash by disabled, or labour constrained beneficiaries easier**. Two options are available: -

- These limited-mobility households could be grouped into clusters in much the same way as was done for the first transfer under KVCTP. Members of the clusters would then delegate a representative to whom a combined payment would be sent. The representative would collect the cash at the distribution point and divide it up accordingly amongst the group members on return to the village. Clustering has other advantages including: -
  - Eliminating the requirement for the issue of multiple SIM cards and handsets.
  - Ease the problems faced by illiterate people in operating the phones.
  - Enable the easy inclusion in the programme of beneficiaries who do not have identity documents (only the cluster representative would need these).
- If cell phone coverage and security permitted, the number of distribution sites could be increased thereby reducing the distance that beneficiaries have to travel.

It is also **recommended that future distributions take place once a month rather than every two weeks**; this would reduce by half the amount of travelling required by agents and beneficiaries.

### 7.3 Incentives for Agents

Clearly the M-pesa system can only work in remote rural areas if agents are prepared to travel out to distribution points with cash on a regular basis. Although in the case of KVCTP Safaricom played an important role in mobilising agents there is likely to be a

critical number of beneficiaries below which making a journey to the distribution site becomes financially non-viable for the agent. It is therefore **recommended that before any future cash transfers using M-pesa, Concern liaise with Safaricom to establish what the minimum number of beneficiaries or amount of commission has to be to create sufficient incentives for agents to stay involved.** Alternatively, if necessary, Concern and Safaricom could devise a system whereby agents are paid a premium on the normal transaction commission as an incentive for delivering the service in remote areas.

#### 7.4 Value for Money

In terms of providing calories for the amount of money available, KVCTP was marginally less effective than a traditional food transfer would have been. The two reasons for this are: under a food transfer, staples would have been bought wholesale while beneficiaries were buying retail from inefficient markets at a time of rapid inflation and the cost of equipping beneficiaries to receive M-pesa.

This is not to say that using M-pesa for delivering cash transfers should be written off; when the costs of equipment are discounted the cash transfer option proved to be more effective than a food distribution in terms of delivering calories. It is **recommended that Concern explore further the point at which cash distributions through M-pesa become more efficient than food distributions in terms of providing minimum calorific requirements.** Consideration should be given to the amortisation of equipment costs, the difference between wholesale and retail prices and the recurring costs of food distribution.

#### 7.5 Other Applications for M-pesa

The extent to which M-pesa can be used as a vehicle for operating other financial services depends to a large extent on the size of the transfer charges and/or who pays them. The Jamii Bora micro credit group, for example, found that charges incurred through the use of M-pesa for loan repayment would add 69% to the interest paid on the average 20 week loan – clearly not viable for their clientele.

If ways can be found to reduce or waive the transaction costs, M-pesa offers a huge opportunity for savings or micro credit schemes targeted at the poorest and it is **recommended that Concern work with Safaricom to help them explore ways in which M-pesa may be tailored (possibly through an adjustment of charges for members of certain schemes) to suit the requirements and profiles of the 50% or so of households living below the poverty line in Kenya.**

Although the costs of equipping target populations to use M-pesa (purchase of phones, chargers and SIM cards) are relatively low compared to other ways of distributing cash, the start up costs account for a smaller proportion of overall programme costs the more money is transferred. By the same token, the costs of equipment would appear unjustified if just one transfer is to be made. Once beneficiaries have been equipped for M-pesa, however, the system offers an excellent opportunity for remotely operating social protection or safety net payments. The communities targeted by the KVCTP, for example, are vulnerable to drought: to offer some degree of protection, payments to targeted households could be triggered when rainfall is below a certain level for a certain number of months, or food prices rising above a certain point. A range of indicators can be used as long as accurate data is readily available.

## **8. REFERENCES**

Brewin, M. and Gondwe, V. 2006. Food and Cash Transfers Project (FACT) - End of Project Internal Evaluation Report, Concern Malawi 2006

CGAP, 2008. Can M-pesa Work for Microfinance Clients? Consultative Group to Assist the Poor email bulletin, June 2008

Davies, S. 2007. Making the Most of It: A regional multiplier approach to estimating the impact of cash transfers on the market. Bath: University of Bath.

Devereux, S, Mthinda, C. Power, F, Sakala, P, Suka, A. 2007. An Evaluation of Concern Worldwide's Dowa Emergency Cash Transfer Project (DECT) in Malawi, 2006/07, Concern Malawi, 2007

FEWSNET 2008, Kenya Country Report April – September 2008

Government of Kenya 2007, Kenya Integrated Household Budget Survey (KIHBS) 2005/06

Kenya National Bureau of Statistics 2007, Basic Report on Well-being in Kenya – 2005/06

Pearson, R.V and Kilfoil, C. 2007, Dowa Emergency Cash Transfer (DECT) Wider Opportunities Evaluation and Recommendations: Solid Lessons and a Promising Vision. Siana Strategic Advisors June 2007

SPHERE Project, 2004. Humanitarian Charter and Minimum Standards in Disaster Response. SPHERE, Geneva

## **9. ACKNOWLEDGEMENTS**

The author would like to thank: -

- Serene Philip, Concern Kenya, for her work on the sections on gender and culture
- Anne Wekesa Ejakait, Concern Worldwide Kenya
- Edgar Andagalu, Safaricom
- All interviewees who gave their time and shared their experiences with the survey team

## 10. APPENDIX 1: TERMS OF REFERENCE

### 1. Introduction

Kenya held the fourth multiparty General Election on 27th December, 2007. A dispute that followed announcement of the results by the Electoral Commission of Kenya quickly degenerated into an unprecedented seven-week long spate of violence in many parts of the country, especially in Nyanza, Rift Valley, Coast, Western, and Nairobi Provinces. Within a very short period of time, numerous shops, commercial outlets and crops were looted, people uprooted, with tens of thousands fleeing ethnically fuelled and hate motivated attacks. The social and economic life of the country was torn apart. The violence led to an estimated loss of 1,200 lives and an estimated 500,000 people displaced. A further 12,000 refugees fled across the border to Tanzania and Uganda and over 41,000 properties were destroyed.

Apart from the immediate humanitarian implications, the economic cost of the crisis has been put at over KSh 100 billion (approx US\$1.5 billion), with a loss of an estimated 500,000 jobs in manufacturing, agro-industry and tourism and grave concerns over food security as people have not been able to harvest or cultivate their farms. The World Bank has estimated that over 2 million Kenyans may have been driven into poverty as a result of the post election violence.

Humanitarian relief agencies have largely been meeting the short term needs of IDPs in formal camp situations and a number of agencies, including Concern, have been focusing a large part of their effort outside of the formal camp situation, namely informal IDP camp settlement in the Rift Valley, Eldoret and Kitale, Naivasha and Nakuru and the urban and rural areas of Nairobi and Kisumu slums, where the traditionally poor and vulnerable population have seen their life's situation significantly worsened, as a result of the violence and huge displacement both into and out of their areas. Although it is close to three months since the post-election crisis, a large number of the displaced and vulnerable households are still facing health risks, insecurity, food shortage and disruption of the children's education, having lost assets, livelihoods and having missed the agricultural season, in whole or in part.

In response to the current crises, Concern Kenya programme has been implementing a series of emergency interventions focusing on IDPs, returnees, vulnerable rural communities and severely affected slum dwellers. Concern's first stage immediate response involved supporting 12 partners across a wide geographical area to meet the immediate food, shelter and transportation needs of IDPs and severely affected slum communities.

This current phase of the emergency is being implemented through a network of some 18 partners (new and old), is focused primarily on food security and is providing assistance in the nature of food assistance, on farm and resettlement inputs (seeds, tools, fertilizers), small scale income support to rural and urban affected, shelter, essential non-food items, psychosocial support and transportation of IDPs to their home areas.

The Kenya programme has just completed planning for a next phase recovery programme which will commence in June 2008 and run for 12 months. It is anticipated that a significant part of the recovery programme will be delivered by cash transfer through the mobile phone network M-PESA system operated by Safaricom, Kenya's largest mobile network provider and the programme is currently piloting this approach in one specific rural area, the Kerio Valley. The details of target areas and household number are as follows:

District	Location	Sub-location	Total targeted household
----------	----------	--------------	--------------------------

Baringo North	Kinyach	Kinyach	233
		Kalabata	118
	Kaboskei Kerio	Ayatia	119
Pokot East	Loiwat	Kipnai	99

## 2. Purpose of the Evaluation

M-PESA has the potential to significantly improve cash transfer initiatives that are critical to addressing humanitarian needs in parts of Kenya. The pilot project undertaken in Kerio Valley provides an opportunity for Concern Worldwide to assess the effectiveness and viability of this mobile phone based system. Such assessment can look specifically at the feasibility and practicality of scaling up the initiative, and recommend strategies to develop a secure and efficient mechanism.

Specifically, the lessons coming of the current pilot, will input into the design of the cash transfer component of the proposed early recovery programme, making recommendations as appropriate.

The purpose of the assessment is therefore to assist the Kenya programme in designing an appropriate framework for data collection, monitoring and documenting of this cash transfer approach, and to feed into the overall organisational learning and practice.

## 3. Structure and Scope of the Evaluation

The evaluation should consider the cash transfer pilot project and M-PESA system against the backdrop of the Kenya context and overall emergency programme with special emphasis on approach, effectiveness, impact, take-up, and benefit, from the perspectives of beneficiaries, partners (including a potential partnership with Safaricom) and Concern Kenya.

## 4. Timeliness of the Pilot Project

The evaluation will consider whether the pilot project is being implemented in a timely manner and whether there have been any significant delays. If so, how have these being overcome. Consideration needs to given to:

Initial pilot project start up.

Pilot project content – sectoral and geographic selection.

Pilot project delivery.

Relationship between Concern, Safaricom, partners and beneficiaries.

## 5. Relevance and Appropriateness of the Pilot Project

The pilot project should seek to benefit those households, individuals and communities affected by the post election violence and conflict, and clearly benefit those made vulnerable as a result. With this in mind the evaluation should consider:

What decisions informed the pilot project approach taken by Concern Kenya and her partners and have they been shown to be the most appropriate.

The extent to which the targeted households, individuals and communities were affected with regard to loss of assets, infrastructure and livelihoods, as measured against other affected households, individuals and communities in the general geographic area.

Whether the pilot project is meeting the identified needs of the targeted households, individuals and communities including the identified needs of the poorest sectors of the community and how these needs were identified.

Whether the pilot project has a demonstrable planning process from inception through completion.

Whether the pilot project is addressing the most relevant humanitarian, rehabilitation and recovery needs of the local population in the most appropriate way possible.

How the pilot project has balanced the demands for speed, permanency and design.

What is the impact of the partnership relationship - on the partners and on the beneficiaries?

Whether the pilot project is a suitable approach and mechanism for delivering humanitarian assistance and recovery interventions within the Kenya context.

## **6. Effectiveness and Quality of the Pilot Project**

The pilot project should seek to ensure adherence to accepted international humanitarian standards. The evaluation should consider:

The quality of the overall pilot project achievements as measured by Sphere (where appropriate), the affected communities themselves and local government representatives? How good are the pilot project achievements?

The effectiveness of contextual analysis and the pilot project planning and design. To what extent has the pilot project required periodic re-pointing and re-directing? Did the pilot project implement what it set out to do and did it require any significant change?

Whether local cultural practices, norms and traditions are being respected with regard to pilot project design and implementation.

How the modalities of the pilot project were communicated and are being accountable to the beneficiaries?

How effective is the pilot project in reducing future vulnerabilities?

How effective is coordination, cooperation and collaboration with local communities, government representatives and partners involved in the pilot project.

## **7. Cost Efficiency of the Pilot Project**

Is the pilot project being implemented in such a way as to give good value for the money spent to achieve the desired standards and outcome?

Was the type of transfer chosen the most efficient use of resources?

Was the type of delivery mechanism (M-PESA) chosen the most efficient use of resources?

## **8. Overall Impact of the Pilot Project**

What has been the uptake of the pilot project by the beneficiaries with a special focus on gender and culture?

What positive change and real and tangible benefits have been realised by the beneficiaries as a result of the pilot project achievements?

Is there any evidence of negative impact with regard to any aspect of the pilot project?



What challenges did the pilot project throw up from the point of view of implementation (beneficiaries, partners and Concern)? How were challenges overcome?

### **9. Evaluation Methodology**

The pilot project evaluation methodology will consist of a visit to the field lasting approximately one week where project areas will be visited and relevant stakeholder meetings and interviews will take place. The evaluation will meet and interview as many relevant stakeholders groups as is possible including, project beneficiaries, project partners (Catholic Diocese of Eldoret), Safaricom and other identified relevant national and international agencies and bodies. A debriefing session will take place in the Concern Nairobi office at the end of the evaluation.

An evaluation report will be prepared within one week of the end of all meetings and interviews in Kepsua Valley, Eldoret and Nairobi and will be presented to the Concern Kenya Country Director.

The final report will address the effectiveness and appropriateness of the pilot project along with practical recommendations for the suitability of cash transfers - the M-PESA system, M&E, data collection and documenting organisational learning opportunities - for use within the context of the planned recovery programme.

### **10. Evaluation Team**

The evaluation will be undertaken by an external consultant who has extensive experience in cash transfer programmes - design, delivery, implementation, monitoring and documenting institutional learning.

### **11. Timetable**